



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
PATENT APPLICATION EXAMINING OPERATIONS

RECEIVED
DEC 28 2000
Group 2600

Applicant: Baoxin et al.

Group Art Unit: 2672

Serial No.: 09/934,004

Examiner:

Filed: August 20, 2001

Attorney Docket No.
KLR:7146.122

Title: SUMMARIZATION OF BASEBALL VIDEO CONTENT

INFORMATION DISCLOSURE STATEMENT
IN ACCORDANCE WITH 37 CFR §1.98

1600 ODS Tower
601 S.W. Second Avenue
Portland, Oregon 97204-3157
December 5, 2001

Box Patent Application
Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

Applicant submits herewith copies of patents and publications of which he is aware and which he desires to have considered by the Patent Office in accordance with 37 CFR §1.97. In accordance with 37 CFR §1.97(b)(3), this Information Disclosure Statement is being submitted before the mailing date of a first office action on the merits of the above-identified application.

In accordance with 37 CFR §1.97(h), the filing of this Information Disclosure Statement will not be regarded as an admission that any patent or combination of patents referred to herein is, or is considered to be, material to patentability under 37 CFR §1.56(b) unless specifically designated as such.

A list of the patents enclosed herewith is set forth on the attached two pages of Form PTO-1449 (Modified).

The person making this statement is the attorney who signs below on the basis of the information supplied by the inventor and the information in his file.

Respectfully submitted,

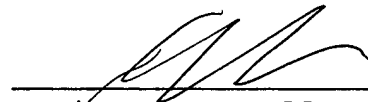


Kevin L. Russell
Attorney for Applicant
Tel: (503) 227-5631

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Box Patent Application, Commissioner for Patents, Washington, D.C. 20231, on December 9, 2001.

Dated: December 9, 2001



Kevin L. Russell



FORM PTO-1449 (Modified)

LIST OF PATENTS AND PUBLICATIONS FOR
APPLICANT'S INFORMATION DISCLOSURE
STATEMENT

(Use several sheets if necessary)

ATTY. DOCKET NO.
KLR: 7146.122SERIAL NO.
09/934,004

APPLICANT: Baoxin et al.

FILING DATE
08/20/01GROUP
2672

RECEIVED

DEC 28 2000

Group 2600

REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

| EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|---------------------|----|-----------------------|---------------|----------------|-------|----------|-------------------------------|
| LVN | AA | US Pat. No. 4,183,056 | Jan. 8, 1980 | Evans et al. | | | |
| | AB | US Pat. No. 5,805,733 | Sep. 8, 1998 | Wang et al. | | | |
| | AC | US Pat. No. 5,956,026 | Sep. 21, 1999 | Ratakonda | | | |
| | AD | US Pat. No. 5,995,095 | Nov. 30, 1999 | Ratakonda | | | |
| | AE | US Pat. No. 6,141,041 | Oct. 31, 2000 | Carlbon et al. | | | |
| | AF | US Pat. No. 6,141,060 | Oct. 31, 2000 | Honey et al. | | | |
| | AG | | | | | | |
| | AH | | | | | | |
| | AI | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | COUNTRY | CLASS | SUBCLASS | TRANSLATION | |
|--|----|-----------------|------|---------|-------|----------|-------------|----|
| | | | | | | | YES | NO |
| | AJ | | | | | | | |
| | AM | | | | | | | |
| | AN | | | | | | | |
| | AO | | | | | | | |
| | AP | | | | | | | |
| | AQ | | | | | | | |
| | AR | | | | | | | |

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|-----|--|--|
| LVN | | J. Canny, "A Computational Approach to Edge Detection", IEEE Trans. Pattern Anal. Machine Intelligence, Vol. 8, pp. 679-698, 1986 |
| | | Y. Wang, Z. Liu, and J-C Huang, "Multimedia Content Analysis - Using both Audio and Visual Cues," IEEE Signal Processing Magazine, Vol. 17, No. 16, pp. 12-36, Nov. 2000 |
| | | D.D. Saur, Y-P. Tan, S.R. Kulkarni and P. Ramadge, "Automatic Analysis and Annotation of Basketball Video", Proc. Of SPIE, Vol. 3022, pp. 176-187, at least one year prior to the filing date |

| | | |
|---------------------------|--|--|
| LUN | | D. Yow, B-L. Yeo, M. Yeung and B. Liu, "Analysis and Presentation of Soccer Highlights From Digital Video", |
| | | Proc. 2 nd Asian Conference on Computer Vision, 1995 |
| O I P E | | T. Kawashima, K. Tateyama, T. Iijima and Y. Aoki, "Indexing of Baseball Telecast for Content-based Video Retrieval", |
| | | Proc. International Conference on Image Processing, 1998 |
| DEC 26 2001 | | B-L. Yeo and B. Liu, "On the Extraction of DC Sequence From MPEG Compressed Video", |
| | | Proc. International Conference on Image Processing, 1995 |
| PATENT & TRADEMARK OFFICE | | H.B. Lu, Y.J. Zhang and Y.R. Yao, "Robust Gradual Scene Change Detection", |
| | | Proc. International Conference on Image Processing, 1999 |
| | | S.J. Golin, "New Metric to Detect Wipes and Other Gradual Transitions in Video", |
| | | Proc. IS&T/SPIE Conference on Visual Communicaitons and Image Processing, 1999 |
| | | M.R. Naphade, R. Mehrotra, A.M. Ferman, J. Warnick. T.S. Huang and A.M. Tekalp, "A High-Performance Shot Boundary Detection Algorithm Using Multiple Cues", International Conference on Image Processing, 1998 |
| | | Proc. International Conference on Image Processing, 1998 |
| | | R. Lienhart, "Comparison of Automatic Shot Boundary Detection Algorithms", |
| | | Proc. IS&T/SPIE Conference on Visual Communications and Image Processing, 1999 |
| | | Y. Rui, A. Gupta, A. Acero, "Automatically Extracting Highlights for TV Baseball Programs", |
| | | Microsoft Research, Redmond, WA, 2000 |
| | | B. Li and M.I. Sezan, "Event Detection and Summarization in Sports Video", |
| | | Sharp Laboratories of America, Camas, WA, 2001, at least one year prior to the filing date |
| | | H. Pan, P. van Beek and M.I. Sezan, "Detection of Slow-Motion Replay Segments in Sports Video for Highlights Generation", |
| | | Sharp Laboratories of America, Camas, WA, at least one year prior to the filing date |
| | | J.S. Boreczky and L.D. Wilcox, "A Hidden Markov Model Framework for Video Segmentation Using Audio and Image Features", |
| | | FX Palo Alto Laboratory, Palo Alto, CA, at least one year prior to the filing date |
| | | S. Eickeler and S. Muller, "Content-Based Video Indexing of TV Broadcast News Using Hidden Markov Models", |
| | | Gerhard-Mercator University Duisburg, Germany, Int'l Conf on Acoustic, Speech and Signal Processing, 1999 |
| | | W. Wolf, "Hidden Markov Model Parsing of Video Programs", |
| | | Proc. Int. Conf. Acoustic, Speech, and Signal Processing, 1997 |
| | | F.R. Kschischang, "Factor Graphs and the Sum-Product Algorithm", |
| | | IEEE Transactions on Information Theory, Vol. 47, No. 2, February 2001 |

RECEIVED

DEC 28 2000

Group 2600

EXAMINER



DATE CONSIDERED

4/25/04

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.